

A semiconductor device and a method for manufacturing the same that forms a self-aligned contact hole between two gate lines. A substrate is provided that has a first gate line formed thereon. An insulator is formed on the first gate line and substrate. Then a portion of the insulator and a portion of the first gate line is selectively removed to split the first gate line into a second gate line and a third gate line and to concurrently expose the substrate. Thus, producing a self-aligned contact hole between the second and third gate lines.

$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & i \\ 0 & 1 \end{pmatrix}$ $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & -i \\ 0 & 1 \end{pmatrix}$ $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ i & 1 \end{pmatrix}$ $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ -i & 1 \end{pmatrix}$ $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 1 \\ 0 & 1 \end{pmatrix}$ $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & -1 \\ 0 & 1 \end{pmatrix}$ $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 1 & i \end{pmatrix}$ $\frac{1}{\sqrt{2}} \begin{pmatrix} 1 & 0 \\ 1 & -i \end{pmatrix}$